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## Bridging the Gap between Science and Practice: Insight to Researchers from Practitioners

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### SYNOPSIS

Five policy advocates and practitioners provide recommendations to researchers to make research data more usable, accessible, and applicable for the field of human immunodeficiency virus (HIV) prevention among injecting and other drug users. Translating research into usable information will facilitate its use within political and policy discussions. When researchers and practitioners truly work together in a common enterprise, the result will be powerful HIV prevention programs that will save lives.

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People who rely on the results of research for the development of practical applications in the field have specific research-related needs for relevant and timely data. Currently, only some of these needs are being met. Policy makers and practitioners working to prevent the spread of the human immunodeficiency virus (HIV) have a deep and abiding interest in how prevention and behavioral science can be adapted and adopted to be maximally useful and widely disseminated.

Research is yielding information that continues to offer direction for HIV prevention policy, practice, and programs in the United States and Canada. In very discrete arenas of both program and policy, research is beginning to provide clear and unequivocal direction that, if correctly employed, would save communities, individuals, and resources.

Because HIV and acquired immunodeficiency syndrome (AIDS) are relatively modern health problems, there is still much to learn about effective responses and interventions and the levels at which those responses and interventions should occur. Some of the major challenges in the provision of primary HIV prevention interventions and programs are in knowing which intervention to employ, how to adapt and adopt interventions for particular communities, and when a set of interventions must be tailored, modified, or changed.

Community-based HIV prevention provider organizations are constantly searching for appropriate, evaluated, demonstrated, and effective science-based interventions that will help them stem the tide of new HIV infections within their target populations. HIV prevention programs that target hard-to-reach injecting drug user (IDU) populations and other noninjecting substance abusers must be community based, user-friendly, and sensitive to the needs of the community and must continuously incorporate feedback from the communities served. In lay terms, research must be needed by the community; interventions must be replicable and must do no harm after the researchers leave the community; and appropriate partnerships between science, the providers, and the relevant community must be actualized.

To address these issues and to bridge the gap between science and practice, we, as field practitioners, make recommendations that should help to better inform researchers about translating science into utilization. The recommendations apply to five areas: access and dissemination, user-friendly publications, forging partnerships, utility, applicability, specific research requests, and, finally, new challenges for the future.

## Access and Dissemination Issues

Community-based HIV prevention practitioners know that research results are available, yet they have often complained that they do not have adequate access to this information. If research results are to benefit community planning and programming activities, the results must be easy to find. An additional frequent complaint from community prevention providers is that, while worthwhile and potentially applicable projects and studies are conducted in one location, ensuing data and models do not get widely communicated to the broader community, to community planning groups (CPGs), or to HIV prevention providers.

When appropriately disseminated, information on interventions that demonstrate effectiveness can have a significant and lasting impact on programs, policies, advocacy, and future interventions and research activities. For example, research that proved the effectiveness of syringe exchange programs (SEPs) in reducing HIV transmission was made readily available. These studies consequently were instrumental in convincing the Detroit City Council to amend the local paraphernalia ordinance to allow SEPs to operate, enabling Connecticut to use research data to change pharmacy laws, and enabling San Francisco to justify the expansion and comprehensiveness of its SEPs.

In contrast, research regarding the effectiveness of various syringe exchange models or research that compares those models against other models has been much less accessible. This gap has made it difficult for some impacted communities to address the data and science needs of policy makers, funders, and the communities.

One invaluable way to bridge the gap between research and practice, between utility and community need, is to provide opportunities for practitioners to meet and talk with research scientists. Interaction of this kind also provides an opportunity to understand research well enough to facilitate its adaptation and adoption in the target community, allowing for the development of effective interventions, sound public health policies, and even improved resource allocations for interventions and programs.

One method for improving dissemination of research findings into the field is to make research articles accessible to those who most need them—the field practitioners. Many academic research articles are published in journals that typically are available only at university libraries, thereby making them inaccessible to practitioners in areas other than university towns, most particularly in developing countries. To get research into the field where

it can save lives, researchers should develop newsletters or synopses of articles (such as research briefs) and provide them to practitioner organizations, CPGs, and other interested parties.

### User-Friendly Publications

Community planners need information from research to be reformatted into a summary form that will be more readily accessible to CPG members, program people, and policy makers. The research information must be understandable and usable by a wide variety of audiences. HIV prevention is often discussed with legislators, boards of supervisors, boards of health, police departments, and jail personnel—all of whom want to understand research data so that they can support policy. Equally important, the intended users of prevention services, the target populations, also must be able to comprehend research findings.

We therefore make the following recommendations:

- Gear publications toward community planners and program managers. Make publications both concise and comprehensive.
- Make articles readable, understandable, and relevant. One reason practitioners might not read and use articles is because they contain theoretical and statistical jargon and appear to be less than relevant for practical application. Make sure that articles are readable and understandable by people who are not experts. If practitioners cannot understand the research, they will not be able to translate it into lifesaving programs.
- Provide the bottom line up front. Many manuscripts contain pages of research design, methods, and methodological and statistical analyses—the entirety of which is virtually unreadable to the layperson who simply wants to know the bottom line. If academic research is to be used by those in the field, it must be concrete, concise, and easy to find.
- Translate research into one-page fact sheets that practitioners can use. Develop research primers that include a short overview of the research; a description of the behavior being studied; a description of the behavior that needs to change; a description of the intervention components being assessed; a description of how the study demonstrated this change; and a footnote to the full article for those who want to delve deeper.

### Forging Partnerships and Working Together

As advocates, practitioners, and prevention providers, we believe that the informal working relationships among substance abuse treatment providers, public health communities, and other pertinent stakeholders should be formalized. Such a formalized partnership can have, and has had, demonstrable positive impact. One such example was the formation of a national task force in Canada to draw up a national action plan in response to the growing and changing HIV epidemic. (Canadian Public Health Association, AIDS Program, Canadian Centre for Substance Abuse. HIV, AIDS and injection drug use: a national action plan. Ottawa: The Association; 1997.) The ongoing national task force includes representatives from public health agencies; aboriginal communities; drug dependency services; ex-drug users; the Canadian AIDS Society; the Canadian Bar Association; the Canadian Association of Chiefs of Police; the Alberta Alcohol and Drug Abuse Commission; the Addiction Research Foundation of Ontario; a provincial health department; and the British Columbia Center for Excellence in AIDS.

Within the United States, reasonably effective dialogue clearly exists among programs funded by the Centers for Disease Control and Prevention (CDC), community planning groups, and state health departments. However, this partnership appears to break down at the level of interaction with prevention scientists and the more research-oriented programs.

The goal of all research in HIV prevention should be to partner in some fashion with the community prevention programs to keep communication lines open, facilitate understanding of the research process and results at all levels, and allow and encourage continuation of research programs found to be effective. As HIV prevention moves farther along the path of basing all its intervention and priority-setting processes on sound science, so too should prevention science seek to ground itself in its point of application—the community (or communities) wherein research is being conducted and utilized.

### Applicability: Taking Research into the Field

Before embarking on a research project, three fundamental applicability questions must be asked and answered by researchers regarding their intended work:

- Is this research generalizable, that is, can it be taken out of the lab or out of the initial community or off the research paper?

- Does the proposed research have utility (something that will directly improve HIV prevention within a specific and defined target community)?
- Will the results of this research produce effective public policy programs and changes to practice?

If the answer to any of these questions is “no,” the research project is likely to be an interesting academic exercise that is not worth the time and money being invested in it.

Community practitioners look for research appropriate and applicable to their own programs and target populations. The practitioners in largely rural states who can find nothing other than prevention studies conducted in an east coast or west coast city will have strong reservations as to the applicability of such programs to their rural populations.

Researchers must be willing to take a stand on their research, even if it does not prove the hypothesis or theory for which it was originally designed. If any portion of the research or its underlying theories are to be translated into programs, researchers should extract the consistent findings and offer recommendations to people in the field. One important tenet in community-based application of good science into good programs is that HIV prevention practitioners are not looking for “perfect” research; they are searching for data that have meaning to them and that can be replicated to the benefit of their communities.

### **Specific Research Requests: What Implementers Need**

From our experience in the HIV prevention field, we have found that HIV prevention practitioners need:

- Information on behavioral surveillance data and risk behaviors concerning particular target populations. Prevention planning groups tend to rely on anecdotal information and intuition. Whereas that method of planning for prevention programs should not be discounted, it would be helpful to be able to back it up with rigorous research data. The combination of anecdotal information and research data is the powerful mixture that people look for when they develop prevention priorities.
- Readily available information on the underlying and mediating factors that affect behavior.

- Information on community-level theories and social networking.
- Qualitative ethnographic research, especially on substance abuse in rural areas.
- Outcome evaluations in the form of technical assistance or training. A “cookbook” for outcome evaluations would help programs and CPGs with design and methodologies.
- The next generation of needle exchange and risk reduction research.
- Research that demonstrates the benefits of prevention. This area is incredibly important because not only does this kind of research help justify current funding, it also helps secure new funding for prevention.
- Research on access to prevention. This research area is related to needle exchange and risk reduction programs but would also be helpful in setting policies with prevention material, such as providing condoms to incarcerated populations.

### **Challenges for the Future**

Four major challenges face the researchers, practitioners, and policy makers in HIV prevention:

- The need to integrate. We cannot survive a system that has fractionalized HIV from sexually transmitted diseases (STDs), substance abuse, mental health, and reproductive health. This challenge includes integrating planning, programmatic, and policy.
- The impact of the medicalization of HIV prevention. Dramatic improvements in drug therapies for people with HIV disease have increased dialogue about the impact of these drug therapies on the provision of primary HIV prevention interventions. For example, postexposure prophylaxis has emerged as a theoretical solution in medically managing recent seroconversions, and many communities fear that reduced viral loads will be the gateway to the reemergence of high risk sexual activity. Nevertheless, the underlying philosophy and technology that informs the medicalization of HIV prevention can be either a tremendous hurdle to quality and comprehensive HIV prevention programs and funding or the necessary catalyst for

transforming our current system into a more robust and effective health promotion consortium.

- The myth of chronic and manageable HIV disease. If future HIV prevention research is predicated on the concept that HIV is chronic and manageable, while at the same time the community is experiencing HIV as nonmanageable, there will be a profound sense of disconnect between the philosophical underpinning of the research and the community.
- The lack of a public health system. HIV prevention resources remain modest, and there has been an erosion of capacity at all levels of provision of prevention services. As HIV moves more into traditionally underserved communities, historically overlooked by all forms of healthcare, the gaps between what science tells us should be done and a community's capacity to implement such a program become all the more pronounced. We cannot stave off HIV infections in communities where there are neither providers nor a public health infrastructure.

## Conclusion

At present, policy discussions often operate in what some have suggested are "data-free zones," because data have been undervalued, underutilized, or ignored by all sides of the debate. Oftentimes, policies and programs are founded with far too much confidence given the paucity of information available. One of the most important challenges in the world of HIV prevention science is to

translate research data so that policy discussions can be based on science and not science fiction, on fact and not persuasion. If researchers do not take the time to translate HIV prevention science into usable information for people at the implementation, government, and policy levels, then this vital HIV prevention information will have little or no positive impact on policy, programs, or funding.

It is as much the responsibility of program, policy, and planning professionals as it is the responsibility of researchers to open up and enhance a dialogue in these areas. As the practitioners and researchers find common ground, they will produce powerful documents and life-saving programs for preventing HIV in IDUs and other substance-abusing populations.

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## Suggested Additional Reading

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